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(54) Title: AN ANTISENSE OLIGONUCLEOTIDE TO INHIBIT MELANOMA INHIBITORY ACTIVITY, MIA

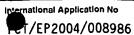
(57) Abstract: An antisense oligonucleotide selected from the group of - the sequence 5'- TTG CAT AAA CCC AAG GAG - 3' and modifications thereof - a fragment having at least 8 nucleotides of the sequence 5'- TTG CAT AAA CCC AAG GAG - 3' and modifications thereof.

INTERNATIONAL SEARCH REPORT



A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C12N15/11 C07H C07H21/00 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) C12N C07H IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, CHEM ABS Data, BIOSIS, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Category * Citation of document, with indication, where appropriate, of the relevant passages WO 01/68122 A (APFEL RAINER ; BIOGNOSTIK 1-15 Α GES (DE); BOGDAHN ULRICH (DE); BRYSCH WOL) 20 September 2001 (2001-09-20) cited in the application * Sequences ID No. 1-8 on page 13 * * Sequences ID No. 10-39 on page 5 *claims WO 99/65928 A (SHANKARA SRINIVAS ; GENZYME 1-6 X CORP (US): ROBERTS BRUCE L (US)) 23 December 1999 (1999-12-23) *SEQ ID NO:5894 on page 213* page 56, line 19 - page 57, line 8 WO 99/50411 A (BUETTNER REINHARD ; SEEBER 1-15 Α STEFAN (DE); RUEGER RUEDIGER (DE); BOSSE) 7 October 1999 (1999-10-07) claims *SEQ ID NO:1* -/--Patent family members are listed in annex. Further documents are listed in the continuation of box C. ΙX Special categories of cited documents : *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance Invention "E" earlier document but published on or after the international *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is clied to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-O document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the International search 29/03/2005 14 March 2005 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nt, Gohlke, P Fax: (+31-70) 340-3016

INTERNATIONAL SEARCH REPORT



		FT/EP2004/008986
	etion) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GOLOB ET AL.: "Characterization of a Transcription Factor Binding Site, Specifically Activating MIA Transcritpion in Melanoma" J. INVEST. DERMATOL., vol. 115, 2000, pages 42-47, XP002268393 * Sequence of HCR, page 43 lines 34-35 * abstract	1-15

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0168122 A	20-09-2001	EP 1133994 A1 AU 4650101 A CA 2403084 A1 WO 0168122 A2 EP 1263456 A2 JP 2003531830 T	19-09-2001 24-09-2001 20-09-2001 20-09-2001 11-12-2002 28-10-2003
WO 9965928 A	23-12-1999	AU 4824199 A AU 4825699 A AU 5204499 A CA 2335452 A1 EP 1086215 A2 JP 2002534056 T WO 9965928 A2 WO 9965924 A2 WO 9966303 A2	05-01-2000 05-01-2000 05-01-2000 23-12-1999 28-03-2001 15-10-2002 23-12-1999 23-12-1999 23-12-1999
WO 9950411 A	07-10-1999	EP 0945507 A1 AU 3599199 A WO 9950411 A2	29-09-1999 18-10-1999 07-10-1999